

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Appellants: Fillipo Costanzo, et al.                | ) Brief on Appeal to                |
|---|-------------------------------------|
| Patent Application No.: 09/897,708                  | ) The Board of Appeals )            |
| Filed: 07/02/2001                                   | ) Group Art Unit: 2142              |
|   | )                                   |
| For "Audio-Video Data Switching and Viewing System" | ) Examiner: Meucci,<br>) Michael D. |
|   | ) Date: April 18, 2007              |

# **BRIEF ON APPEAL**

Mail Stop Appeal Brief – Patents Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an appeal from the Final Action, dated September 19, 2006, for the above identified patent application. Appellants submit that this Appeal Brief is being timely filed before the final deadline of July 20, 2007, since the Notice of Appeal was filed on December 18, 2006, and received by the USPTO on December 20, 2006. A two-month request for extension of time and a corresponding time extension fee accompanies this request.

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# **REAL PARTY IN INTEREST**

The real parties in interest to the present application are Filippo Costanzo, Saverio Roncolini and Antonio Rossi.

#### RELATED APPEALS AND INTERFERENCES

Appellants submit that there are no other prior and pending appeals, interferences or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# **STATUS OF CLAIMS**

Claims 1, 2, 4-17, 19-22, 24-39, 41-44, 46-51, 53-55, 57 and 58 are currently pending and are the subject of this Appeal and are reproduced in the accompanying Claims appendix. Claims 3, 18, 23, 40, 45, 52, 56, and 59-62 were canceled during prosecution.

# **STATUS OF AMENDMENTS**

No Amendment After Final Rejection has been entered.

#### SUMMARY OF CLAIMED SUBJECT MATTER

The invention described and claimed in the present application generally relates to a audio-video data switching and viewing system (Title, p. 1, lines 5-7 and claims).

In summary, this is accomplished by a computer system as recited in independent claim 1. The computer system is for viewing and switching of audio-video data, comprising a plurality of audio and video sources (Fig. 2, elements 12 –page 6, lines 21-22) containing information referring to an event, a streaming server (Fig. 2, element 11 –page 6, lines 20, 23), streaming the contents of a first audio file and a first video file from the audio and video sources (Fig. 2, elements 12 –page 6, lines 21, 22) to a plurality of users over a network, the first audio file being interleaved with the first video file, the streaming server (Fig. 2, element 11 –page 6, lines 20, 23) establishing separate sessions with the

plurality of users by sending each user a separate stream, a feed distributor (Fig. 2, element 13 –page 6, lines 22-23), connected between the audio and video sources (Fig. 2, elements 12 –page 6, lines 21-22) and the streaming server (Fig. 2, element 11 –page 6, lines 20,23), the feed distributor (Fig. 2, element 13 –page 6, lines 22-23) controllably feeding the first audio file and first video file to the streaming server (Fig. 2, element 11 – page 6, lines 20, 23), and a user-operated control unit (Fig. 2, element 14-page 6, lines 24-25, 28-29) communicating with the feed distributor (Fig. 2, element 13 –page 6, lines 22, 23) and controlling operation of the feed distributor, so as to instruct the feed distributor to switch between video files whereby, upon switching, the feed distributor (Fig. 2, element 13 –page 6, lines 22-23) feeds to the streaming server (Fig. 2, element 11 –page 6, lines 20,23) a second video file which is different from the first video file without altering the first audio file, the second video file being interleaved with the first audio file.

By way of further summary, this is also accomplished by a computer system as recited in independent claim 21. The computer system is for viewing and switching of audio-video data, comprising a plurality of audio and video sources (Fig. 2, elements 12 -page 6, lines 21-22) containing information referring to an event, a streaming server (Fig. 2, element 11 -page 6, lines 20, 23), streaming the contents of a first audio file and a first video file from the audio and video sources (Fig. 2, elements 12 -page 6, lines 21-22) to a plurality of users over a network, the first audio file being interleaved with the first video file, the streaming server establishing separate sessions with the plurality of users by sending each user a separate stream a feed distributor (Fig. 2, element 13 -page 6, lines 22-23), connected between the audio and video sources (Fig. 2, elements 12 -page 6, lines 21-22) and the streaming server (Fig. 2, element 11 -page 6, lines 20, 23), the feed distributor (Fig. 2, element 13 –page 6, lines 22-23) controllably feeding the first audio file and first video file to the streaming server; and a user-operated control (Fig. 2, element 14 –page 6, lines 24-25, 28-29) unit communicating with the feed distributor (Fig. 2, element 13 – page 6, lines 22-23) and controlling operation of the feed distributor, so as to instruct the feed distributor to switch between audio files whereby, upon switching, the feed distributor feeds to the streaming server a second audio file which is different from the

first audio file without altering the first video file, the second audio file being interleaved with the first video file.

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By way of further summary, this is also accomplished by a computer-operated method as recited in independent claim 43. The computer-operated method is for viewing and switching of audio-video data, comprising the steps of providing a plurality of audio and video sources (Fig. 2, elements 12 –page 6, lines 21-22) containing information referring to an event, streaming (Fig. 2, element 11 –page 6, lines 20, 23) contents of a first audio file and a first video file from the audio and video sources (Fig. 2, elements 12 –page 6, lines 21-22) to a plurality of users over a network, the first audio file being interleaved with the first video file, establishing (Fig. 2, element 11 –page 6, lines 20,23) separate sessions with the plurality of users by sending each user a separate stream, controlling (Fig. 2, element 13 –page 6, lines 22-23) the streaming of video files, so as to switch between video files, streaming, upon switching, a second video file which is different from the first video file without altering the first audio file, the second video file being interleaved with the first audio file.

By way of additional summary, this is also accomplished by a computer-operated method as recited in independent claim 50. The computer-operated method is for viewing and switching of audio-video data, comprising the steps of providing a plurality of audio and video sources (Fig. 2, element 12 –page 6, lines 21-22) containing information referring to an event, streaming (Fig. 2, element 11 –page 6, lines 20,23) contents of a first audio file and a first video file from the audio and video sources (Fig. 2, elements 12 –page 6, lines 21-22) to a user over a network, the first audio file being interleaved with the first video file, establishing (Fig. 2, element 11 –page 6, lines 20,23) separate sessions with the plurality of users by sending each user a separate stream, controlling (Fig. 2, element 13 –page 6, lines 22-23) the streaming of audio files, so as to switch between audio files, streaming, upon switching, a second audio file which is different from the first audio file without altering the first video file, the second audio file being interleaved with the first video file.

## GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

**Issue 1:** Whether Claims 1, 21, 43 and 50 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear") and U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato")

Issue 2: Whether Claims 2, 4, 9, 20, 22, 24, 42, 44, 46, 48, 51 and 53 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear") and U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato")

**Issue 3:** Whether Claims 5-8, 25-28, 47 and 54 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear") and U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato")

Issue 4: Whether Claims 10, 32, 49 and 57 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,706,054 to Hannah (hereinafter "Hannah")

**Issue 5:** Whether Claims 11-12 and 33-34 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 6,757,305 to Soepenberg (hereinafter "Soepenberg")

Issue 6: Whether Claims 13, 35 and 58 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 6,757,305 to Soepenberg (hereinafter "Soepenberg")

**Issue 7:** Whether Claims 14 and 36 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter Matthews), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter Fryer), U.S. Pat. No. 5,170,252 to Gear (hereinafter Gear), U.S. Pat. No. 5,884,004 to Sato (hereinafter Sato), U.S. Pat. No. 6,757,305 to Soepenberg (hereinafter Soepenberg) and U.S. Pat. No. 5,649,105 to Aldred (hereinafter Aldred)

Issue 8: Whether Claims 15 and 37 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter Gear), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato"), U.S. Pat. No. 6,208,335 to Gordon (hereinafter "Gordon") and U.S. Pat. No. 5,613,122 to Burnard (hereinafter "Burnard")

**Issue 9:** Whether Claims 16, 17, 38 and 39 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 6,510,553 to Hazra (hereinafter "Hazra")

**Issue 10:** Whether Claims 19 and 41 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter Matthews), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and Kunda/McCanta (Google Groups) (hereinafter "Kunda/McCanta")

**Issue 11:** Whether Claim 29 is patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,410,698 to Danneels (hereinafter "Danneels")

**Issue 12:** Whether Claims 30 and 31 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,410,698 to Danneels (hereinafter "Danneels")

**Issue 13:** Whether Claim 55 is patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,410,698 to Danneels (hereinafter "Danneels")

#### **ARGUMENT**

Issue 1: Whether Claims 1, 21, 43 and 50 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear") and U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato")

In the final Office Action of September 19, 1006, the Examiner rejects Claims 1, 21, 43 and 50 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear and Sato. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

## Claim 1

In section 3 of the Final Action of September 19, 2006 the Examiner rejects claims 1, 21, 43 and 50 under 35 USC 103(a) as being unpatentable over U.S. Pat. No. 5,600,368 to Matthews, in view of U.S. Pat. No. 6,233,428 to Fryer, U.S. Pat. No. 5,170,252 to Gear, and U.S. Pat. No. 5,884,004 to Sato. The Appellants respectfully disagree.

\* \* \* \*

Claim 1 recites, among others, the following six features:

- a) "(a streaming server, streaming the contents of a first audio file and a first video file from the audio and video sources to a plurality of users over a network,) the first audio file being interleaved with the first video file,"
- b) "the streaming server establishing separate sessions with the plurality of users by sending each user a separate stream;"
- c) "a feed distributor, connected between the audio and video sources and the streaming server, the feed distributor controllably feeding the first audio file and first video file to the streaming server; and"

**d)** "a user-operated control unit communicating with the feed distributor and controlling operation of the feed distributor,"

- e) "so as to instruct the feed distributor to switch between video files whereby, upon switching, the feed distributor feeds to the streaming server a second video file which is different from the first video file without altering the first audio file,"
- f) "the second video file [of feature e)] being interleaved with the first audio file [upon switching]."

## Features a), b) and f) with reference to Sato

In section 3 of the Final Action, the Examiner admits that Matthews does not explicitly teaches neither a), nor b) nor f). See section 3 of the Final Action, lines 1-4 of the first full paragraph of page 4 of the Final Action. Following that statement (see page 4, line 4 through page 5 line 8 of the Final Action), the Examiner appears to opine that features a), b) and f) are disclosed in Sato. In particular, the Examiner makes reference to lines 49-53 of column 52 and lines 53-58 of column 52 of Sato.

# 1. Sato does not teach feature b)

As a first comment, Appellants note that feature b) of claim 1 of the present application refers to a "streaming server establishing separate sessions with the plurality of users by sending each users a separate stream." Given that the subject matter of Sato is an optical disc (see title, abstract, figures etc of Sato), the Examiner is clearly in error.

# 2. Sato does not teach feature f)

With reference to the language "the first audio file being interleaved with the first video file" of feature a), Appellants do not contest that such language is discloses by Sato. However, Appellants strongly disagree with the Examiner with reference to the alleged presence in Sato of feature f). Such feature f) is disclosed, according to the Examiner, by the language "It is possible to avoid intermitting the audio presentation, however, by writing the same (common) audio data to each angle within a multi-angle scene period on the smallest angle switching unit (ILVU) level" (lines 49-53 of column 52 of Sato).

In the response mailed by Appellants on July 13, 2006, Appellants replied to an analogous rejection (set forth by the Examiner in a previous Action), noting to the Examiner that the above passage of Sato was also reflected by what shown in Figures 79 and 80 of Sato. In those figures, Sato makes reference to contemporaneous multiple AV streams (according to the point of view), so that, upon switching, the user 'jumps' on a different stream. However, in case of a jump on a different stream upon switching, the "second video file" of Sato cannot be "interleaved with the first audio file" as recited in claim 1, it can only be interleaved with a different audio file, the different audio file possibly having the same content of the first audio file. In other words, Sato does what represented by Appellants in Figure 1 (prior art) of the present application, where separate streams for separate points of view are provided.

In the Final Action, the above comments of the Appellants have been addressed by the Examiner in section 19, page 24. In particular, the Examiner argues that Sato does not alter the first audio signal upon switching (as claimed) and that it merely describes writing a single audio file to multiple video files at the feed distributor, thereby multiplexing the signal and never altering the first audio file (emphasis added by Appellants).

In answer to this observation, Appellants submit that there is a difference between 1) writing common audio data to each different video file (as done in Sato) and 2) interleaving, upon switching, the same audio file with the new video file (as recited in claim 1). Item 1) requires the presence of multiple AV streams, while Appellants' Item 2) just needs a single AV stream. In Sato, the AV files are different even if they contain the same audio signal. In the present invention, an A1-V1-A1-V1-A1 file is followed, for example, by an A1-V2-A1-V2-A1 file upon switching, without the need to use parallel, coexistent streams (as Sato does) and then jumping from one stream to another. The Examiner appears to confuse the concept of 'common audio data' with the concept of 'same file.' This is tantamount to submit that multiple CD's containing the same song are the same CD just because they contain the same song. On the contrary, they are different CD's each containing its own audio file with the same data.

As a further comment to the above observations, the Examiner also appears to contradict himself in the above mentioned statement of paragraph 19. On one side, the Examiner states that Sato does not alter the first audio signal upon switching; on the other side, the Examiner states that a single audio file is written to multiple video files. Therefore, the Examiner admits that multiple replicas (hence multiple streams) of the same audio file exist in Sato, which is different from what stated in Appellants' claim that a second video file is interleaved with a same audio file as before. In other words, multiple replicas of a same audio file are multiple audio files, one physically different from the other, even if the audio content is the same.

Incidentally (turning again to section 19 of the Final Action), the Examiner seems also to state that the wording "without altering the first audio file" present in the above mentioned feature e) is also disclosed in Sato. Appellants initially note that this statement does not appear to match with other statements of the Examiner in the same Final Action (and in the previous actions), wherein it was noted by the Examiner that such feature is disclosed in Gear. Appellants will respond to the appropriateness of using Gear later in the present Brief. At this juncture, however, Appellants would like to take issue with the fact that Sato allegedly discloses such feature, because it actually does not in view of the above discussion.

#### 3. Conclusion on the extent of disclosure in Sato

Therefore, in view of the above, Appellants submit that Sato does not disclose features b) and f) of claim 1.

# 4. There is no motivation to combine Sato with the other disclosures cited by the Examiner during prosecution

With reference to Sato, Appellants also submit that the person skilled in the art would not be motivated to combine Sato with Matthews or the other documents cited by the Examiner.

In this respect, as also pointed out by Appellants in the response mailed by Appellants on July 13, 2006, Sato discloses a method for recording an AV bitstream on an optical disk. See, for example, Figure 2 in Sato. Sato does not relate to Internet or networks. Therefore, Sato does not address bandwidth problems related to the replication of additional points of view (even if those additional points of view are not selected by the user) because Sato is applied to a context (recording of an optical disk) where bandwidth is not relevant at all.

In section 20 of the Final Action (page 25 of the Final Action) the Examiner acknowledges that motivation to combine one reference with another must exist in order to form a proper 35 USC 103(a) rejection. However, in doing that, the Examiner directs the Appellants' attention to lines 1-5 of page 5 of the Final Action. Those lines, though, merely copy features taken from the Appellants claims!

Furthermore, the reasoning of the Examiner appears to be circular at best. In other words, if a claim recites features A, B and C, and a first reference allegedly discloses A+B and a second reference allegedly discloses C, the Examiner's reasoning is that motivation to combine the first reference with the second reference is because the second reference discloses C! This is not the right test, of course. The Examiner is reminded, in particular, of MPEP 2143, where it is clearly stated that "The teaching . . . to make the claimed combination . . .must . . . be found in the prior art, not in applicant's disclosure." Moreover, as also stated in MPEP 2143.01 I, relevant factors to the "motivation to combine" test are 1) the nature of the problem to be solved; 2) the teachings of the prior art and 3) the knowledge of the persons of ordinary skill in the art.

As to item 1), the nature of the problem to be solved in Sato is that of overcoming the limits of conventional authoring systems in <u>optical disks</u> to process a large data stream containing sufficient information to satisfy many different user requirements (see Sato, column 2, lines 35-40). In particular, Sato provides a data structure which allows an <u>optical disk</u> with limited capacity to record a large amount of information (see Sato, column 2, lines 18-26). As to item 2), an optical disk is provided, in which a multi-scene

period is appropriately arranged and multi scene data are contiguous (see, for example, column 2 lines 47-49 of Sato). As to item 3), the person skilled in the art is an expert in optical disk technology.

All those items explicitly acknowledge and confirm what already stated by Appellants above, i.e. that an optical disk environment is completely different from an Internet environment.

Incidentally, even assuming –for the sake of discussion- that disk space can be equated with bandwidth, it should be noted that claim 1 also recites a "streaming server establishing separate sessions with [a] plurality of users by sending each user a separate stream." The emphasis being on the fact that, in the present invention as claimed, waste of bandwidth (each user is being sent a separate stream) is secondary when compared with user personalization. On the contrary, in the optical disk structure of Sato allocation of disk space is primary.

Therefore, the person skilled in the art is not motivated to combine Sato with the other disclosures cited by the Examiner during prosecution of the present application.

# Feature b) with reference to Fryer

Claim 1 recites "the streaming server establishing <u>separate sessions</u> with the plurality of users by sending each user a separate stream"

## Fryer does not teach feature b)

- 1. In section 3 of the Action of April 13, 2006 (second full paragraph of page 3), the Examiner opined that such feature is disclosed in Fryer, where reference was made to column 6, lines 35-45 of Fryer.
- 2. In the response of July 13, 2006 Appellants stated that such feature refers to a so-called 'unicast' mode as shown, by way of example and not of limitation, between page 12, line 25 and page 13, line 8 of the application as filed. In that passage it is noted how the waste

of bandwidth of the unicast method can be turned to an advantage because each client can personalize his or her own show.

In that response, Appellants also commented on the Examiner's citation of Fryer's column 6, line 35-45. That passage recites that server 3 in Fryer "is connected to . . . routers . . . serving to split the video stream . . . into multiple video streams . . . conserving the amount of bandwidth." With reference to such passage, Appellants noted that what Fryer discloses is a multicast method, not a unicast one, as also explained by Appellants in the above cited section of Appellants' specification, where it is noted that "[i]n the multicasting model, one single stream of data reaches the various users through routers", which is exactly what happens in Fryer. In particular –Appellants noted-Fryer does not disclose an "establishing [of] separate sessions with the plurality of users" because there is a single session replicated to various users. Appellants also noted that Fryer provides a teaching which is the exact opposite of feature b) of claim 1. In Fryer, the emphasis is on the conservation of bandwidth while in the establishment of separate sessions the emphasis is on personalization by the user even if this requires additional bandwidth.

3. In section 18 of the Final Action, the Examiner initially noted that if Appellants wanted to assert the above feature to be a 'unicast' feature, Appellants should so recite in the claim. The Examiner also cited *In re Van Geuns* 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993) to support his assertion.

In response to this, Appellants note that the language of feature b), i.e. "the streaming server establishing separate sessions . . . sending each user a separate stream" is sufficient enough for the person skilled in the art to understand that a unicast model is meant by those words. In particular, the person skilled in the art will understand that a 'session' is a dedicated network connection between a user and a server, where exchanges of network packets—specific to that connection- occur between the server and the user. As to the Examiner's use of *In re Van Geuns*, Appellants note that the present case is different from what stated in that decision. In that decision, the proprietor eas

trying to assert the patentability of a species (NMR apparatus) while a genus (uniform magnetic field) was recited in the claims. Here, the situation is different. Applicant's wording in the claim (separate sessions . . . separate stream) is a clear definition of what unicast means, and not a genus thereof.

4. In the same section 18, the Examiner also replies to the Appellants' arguments of July 13, 2006 and states that i) "the sessions as disclosed in Fryer are indeed separate sessions by nature" and ii) "the broadcast server as in Fryer is not simply replicating a stream." In doing so, the Examiner makes reference to a different passage of Fryer (lines 47-53 of column 6) cited to the Appellants for the first time. Specifically, the Examiner references the following wording of Fryer: "The video stream generated by a camera may, [A.] in addition to being supplied directly to a broadcast server 3, [B.] be recorded for delayed broadcast during periods of inactivity at the center of private-time for center workers, [C.] or as part of a menu of viewing options for the parent, [C.1.] who may be given the option of viewing a live activity or replaying an earlier activity."

Appellants will now show that all three of the above instances refer to a <u>broadcasting</u> model. Therefore, no "separate sessions" are established in any of the case below.

In particular, in the above paragraph mentioned by the Examiner, Fryer discloses a video stream generated by a camera, which can behave in three different ways:

- A. is supplied directly to a <u>broadcast</u> server 3 which transmits simultaneously a number of streams in a <u>single session</u>, the number being equal to the number of subscriber computers online (see column 6, lines 40-42 of Fryer);
- **B.** may be recorded for delayed <u>broadcast</u>, during periods of inactivity (no live activity available), to a number of subscriber computers online (see column 6, lines 47-48 of Fryer);
- C. can be recorded for delayed <u>broadcast</u>, during periods of activity (live activity available), to a number of subscriber computers online (see column 6 lines 51-53), or to a number of purchasing users (pay- per view on request see column 5 lines 13-21 and column 7 lines 17-20 of Fryer).

Appellants also note that point C. includes C.1. which is to be read as follows: "the video stream generated by a camera may... be recorded for delayed broadcast... as part of a menu of viewing options for the parent, [C.1.] who may be given the option of viewing a live activity or replaying an earlier activity".

Therefore, point C. discloses a system (comprising a menu of viewing options), which "give[s] [to the parents] the option of viewing a live activity or replaying an earlier activity", wherein simultaneous <u>broadcasting</u> of the following streams occurs:

- A.1. a live activity stream (to the plurality of subscriber computers online);
- **B.1.** a recorded stream (to the plurality of subscribers computer online); and/or
- C.1. a recorded stream (to a number of purchasing users pay- per-view on request).

Such system enables the parent to choose among the available live activity/ies (point A.1.), the available replaying activity/ies (point B.1.) or to purchase recorded activity/ies available only as a pay- per view "option" (point C.1.).

Incidentally, such features are also disclosed between column 4, line 65 and column 5, line 12 of Fryer. In particular, at column 5, lines 4-12 Fryer discloses a method comprising the steps of "generating a video stream, supplying the video stream to a regional broadcast server ..., optionally recording the video stream for later playback or use in training sessions, splitting the live or recorded video stream into multiple video streams, supplying the multiple video streams to a plurality of subscribers, and displaying a real-time live video image of the child on a subscribers computer" (emphasis added).

With reference to the above mentioned Pay-Per-View option, Appellants would like to stress that such option is a "broadcast" system in which the viewers can order and purchase events at a scheduled time. Such events are broadcast and shown at the same time to everyone who orders them.

Therefore, Appellants stress again the fact that Fryer discloses only broadcast transmissions (see, e.g., column 10, line 2 and column 4, lines 56-64) at scheduled time (see, e.g., column 8 lines 57-62): either live (option A.) or recorded (options B. and C.).

In conclusion, Fryer does not disclose "[a] streaming server [which] establish[es] separate sessions with the plurality of users by sending each user a separate stream", (feature b) of claim 1).

#### Feature c) with reference to Fryer and Matthews

Claim 1 recites: "a feed distributor, connected between the audio and video sources and the streaming server, the feed distributor controllably feeding the first audio file and first video file to the streaming server; and"

# 1. Fryer does not teach the feed distributor of feature c)

In section 3 of the Final Action (pages 2 and page 3), the Examiner recognizes that Matthews does not explicitly teach the feed distributor connected between the audio/video sources and the streaming server. However, according to the Examiner, such feature is apparently disclosed in Fryer, column 6 lines 35-40, Figure 1 and column 7 lines 25-28 of Fryer.

Appellants note that column 6 lines 35-40 of Fryer disclose a "broadcast server 3 [...] located at a regional office of or ISP office capable of serving a number of centers, and [...] connected to the routers by a broad bandwidth lease line, serving to split the video stream from a camera in the classroom into multiple video streams depending on demand from subscriber computers", while column 7 lines 25-28 of Fryer state: "for live events, broadcast to multiple centers, the regional office's video broadcast server 3 will split a single live stream into multiple streams and route each one to a participating center."

In view of the above, it seems that the Examiner is of the opinion that Appellants' "feed distributor" reads on Fryer's broadcast server 3. Appellants strongly disagree with this understanding and note once again that the above paragraphs just describe a server which splits a video stream from a camera into multiple video streams (equal to the number of subscriber computers online).

Moreover, the Examiner cannot take two different positions, i.e. that *i*) broadcast server 3 in Fryer is a streaming server (as asserted by the Examiner in section 18 of the Final Action) and ii) broadcast server 3 in Fryer is a feed distributor (as asserted by the Examiner in section 3 of the Final Action). If Appellants claim a "feed distributor" connected to a "streaming server", the Examiner cannot use the same reference (e.g. element 3 in Fryer) both as a "streaming server" and a "feed distributor"!

Moreover, following the Examiner's construction in section 3 of the Final Action, thus assuming that Fryer's broadcast server is a feed distributor, which is the element in Fryer that should serve the function of a streaming server? Even more so, how can the alleged feed distributor be connected between the audio and video sources and the streaming server?

It follows that Fryer's broadcast server 3 is not the feed distributor claimed in feature c), with the consequence that feature c) is not at all disclosed in Fryer.

# 2. Matthews does not teach the feed distributor of feature c)

In section 3 of the Final Action (pages 2 page 3), the Examiner states that Matthews teaches "a user operating control communicating with <u>feed distributor</u> and controlling operation of the feed distributor, ...(lines 17-46 of column 5 and Fig. 1, 3, and 6)" (emphasis added).

Appellants have looked at the passage cited by the Examiner and have not been able to find where, in Matthews, the alleged feed distributor is disclosed. Figure 1 of Matthews shows a remote control handset 26, a television 22 and a set-top box 24. Figure 2 of Matthews shows a camera arrangement around a baseball field 40. Figure 3 of Matthews shows camera control buttons 34 of the remote control handset 26. Figure 6 of Matthews shows the same elements of Figure 1 together with option icons 100, 102 and a modal select icon 104 on the television 22. Therefore, none of the cited Figures shows or suggests the presence of a feed distributor in Matthews.

Moreover, column 5 (lines 17-46) of Matthews discloses an interactive television system comprising 1) a remote control handset, 2) a set-top box comprising 3) a virtual channel selector which is connected to all channels coming from a cable company. The virtual channel selector, in response to a selected camera button (on the remote control handset 26) depressed by a viewer, switches among a number of virtual channels. The virtual channels, in Matthews, carry the video streams from different cameras positioned, for example, on at a baseball field. None of those features are similar or equivalent to a feed distributor.

# Feature d) with reference to Matthews

Claim 1 recites: "a user-operated control unit communicating with the feed distributor and controlling operation of the feed distributor"

# 1. Matthews does not teach feature d)

In section 3 of the Final Action (page 2), the Examiner states that Matthews teaches a "<u>user operated control unit</u> communicating with feed distributor and controlling operation of the feed distributor, so as instruct the feed distributor to switch between video files, and feeding a second video file which is different from the first video file (lines 17-46 of column 5 and Fig. 1, 3, and 6)".

Appellants have reviewed the passages cited by the Examiner but have not been able to find reference to a user operated control unit, let alone to what is this control unit connected.

For example, if the Examiner believes that remote control handset 26 in Figure 1 is the "user operated control unit", where is the "feed distributor" and how is the "user operated control unit" connected to the "feed distributor"?

Appellants note that in Matthews the presence of a virtual channel selector 74 is disclosed, see Figure 4. The channel selector 74 communicates with the remote control handset 26. However, should the Examiner assume -in view of this observation- that the channel selector 74 represents a feed distributor, how can Matthews' channel selector 74

be "connected between the audio and video sources and the streaming server"? In other words, the language of previously discussed feature c) of the Appellants' claim clearly implies that the feed distributor is upstream of the streaming server, i.e. on the server side. In stark contrast, channel selector 74 of Matthews is on the client side.

## Feature e) with reference to Gear

Claim 1 recites: "...so as to instruct the feed distributor to switch between video files whereby, upon switching, the feed distributor feeds to the streaming server a second video file which is different from the first video file without altering the first audio file"

# 1. Gear does not teach feature e)

In section 3 of the Final Action, the Examiner states that Matthews does not teach switching to a second video file without altering the first audio file. According to the Examiner, such feature is apparently disclosed in Gear (Abstract and lines 29-40 of column 2). The Appellants respectfully disagree.

The Abstract in Gear talks about connection between audio inputs/outputs and pipes of audio bus or connection between video inputs/outputs and pipes of a video bus. Further, column 2 lines 29-40 generally talk about interconnection and mixing between audio streams and video streams. The Appellants have not been able to find where, in the above passages, "feed[ing of] a second video signal ... different from [a] first video signal [occurs] without altering the first audio signal" as recited in claim 1. Therefore, such feature is not taught in Gear.

# 2. There is no motivation to combine Matthews or Fryer with Gear

Further, even assuming, *arguendo*, that such feature is disclosed in Gear, where is the motivation for the person skilled in the art to combine such teaching with Matthews or Fryer? As explained by Appellants with reference to feature c) above, it is not at all clear where a feed distributor is shown in Matthews and in Fryer.

Moreover, even assuming – again for the sake of argument - that in Matthews the feed distributor is allegedly the channel selector 74 of Figure 4, such selector clearly cannot feed to the streaming server a signal, because that would mean inverting the direction of the arrows in the set-top box 24 of Figure 4 of Matthews. Moreover, even assuming that in Fryer the feed distributor is allegedly the broadcast server 3 of Figure 1, such broadcast server clearly cannot feed to the streaming server any signal, because in Fryer there is no element, except the same broadcast server 3, which can serve the function of the streaming server, see point 1 of feature c).

Therefore, the person skilled in the art is not motivated to combine Gear with Matthews or Fryer.

\* \* \* \*

Hence, Claim 1 is patentable over Matthews in view of Fryer, Gear and Sato and the Examiner's rejection should be reversed on appeal.

#### Claim 21

Claim 21 is a computer system claim that corresponds to claim 1. The Examiner has rejected claim 21 for the same exact reasons as claim 1 and thus Appellants submit that the above discussion directed to claim 1 is equally applicable to claim 21, and that therefore claim 21 is also nonobvious and allowable.

## Claim 43

Claim 43 is a method claim that corresponds to computer system claim 1. The Examiner has rejected claim 43 for the same exact reasons as claim 1. Appellants therefore submit that the above discussion directed to the nonobviousness of claim 1 is equally applicable to claim 43, and for the very same reasons submit that claim 43 is nonobvious in view of the cited art.

Claim 50 is a method claim that corresponds to computer system claim 1. The Examiner has rejected claim 50 for the same exact reasons as claim 1. Appellants therefore submit that the above discussion directed to the nonobviousness of claim 1 is equally applicable to claim 50, and for the very same reasons submit that claim 50 is nonobvious in view of the cited art.

Issue 2: Whether Claims 2, 4, 9, 20, 22, 24, 42, 44, 46, 48, 51 and 53 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear") and U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 2, 4, 9, 20, 22, 24, 42, 44, 46, 48, 51 and 53 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear and Sato. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

#### Claim 2

Claim 2, at least based on its dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.

## Claim 4

Claim 4, at least based on its dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.

#### Claim 9

Claim 9, at least based on its dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.

- 1) Claim 20, at least based on its dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.
- 2) Appellants also submit that Matthews does not disclose, suggest or teach the following feature recited by Claim 20 of the present application:

"where switching occurs in a <u>preprogrammed</u> way" (emphasis added)

In section 4.e. of the final Office Action, the Examiner objects to claims 20 and 42 by making reference to column 1, lines 15-29 of Matthews. Appellants have looked at the passage cited by the Examiner and have not been able to find where, in Matthews, the "switching [which] occurs in a preprogrammed way " is disclosed. In particular, Appellants note that the passage cited by the Examiner discloses a conventional broadcast program where "the producer relies on his or her creativity and experience to timely select the appropriate camera viewpoint which best conveys the sporting event", see column 1 lines 26-28 of Matthews. Appellants note that preprogrammed means programmed in advance. To the contrary, in Matthews, switching does not occur in a preprogrammed way but it is the producer that switches (relying on his creativity and experience) among a number of cameras.

Hence, Claim 20 is patentable over Matthews, Fryer, Gear and Sato and the Examiner's rejection should be reversed on appeal.

## Claim 22

Claim 22, at least based on its dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.

# Claim 24

Claim 24, at least based on its dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.

- 1) Claim 42, at least based on its dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.
- 2) Appellants also submit that Matthews does not disclose, suggest or teach the feature recited by Claim 42 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 20 above.

# Claim 44

Claim 44, at least based on its dependency on Claim 43, is patentable over Matthews, Fryer, Gear and Sato.

# Claim 46

Claim 46, at least based on its dependency on Claim 43, is patentable over Matthews, Fryer, Gear and Sato.

## Claim 48

Claim 48, at least based on its dependency on Claim 43, is patentable over Matthews, Fryer, Gear and Sato.

## Claim 51

Claim 51, at least based on its dependency on Claim 50, is patentable over Matthews, Fryer, Gear and Sato.

#### Claim 53

Claim 53, at least based on its dependency on Claim 50, is patentable over Matthews, Fryer, Gear and Sato.

Issue 3: Whether Claims 5-8, 25-28, 47 and 54 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear") and U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 5-8, 25-28, 47 and 54 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear and Sato. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

#### Claim 5

- 1) Claim 5, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.
- 2) Appellants also submit that Matthews does not disclose, suggest or teach the following feature recited by Claim 5 of the present application:

"wherein the streaming server and the feed distributor are located on the same machine"

In section 5.a. of the final Office Action, the Examiner states that the above feature is disclosed in Matthews. In doing that, the Examiner directs the Appellants' attention to the passage disclosed between line 57 of column 6 and line 19 of column 7, and Figure 7 of Matthews.

Appellants note that the Examiner is making reference to the above passage for the first time. In other words, given that claim 5 is dependent on claim 1, the rejection of claim 1 should be consistent with the rejection of claim 1, whenever appropriate. The Examiner cannot first state (claim 1) that the streaming server and the feed distributor are disclosed at column 6 (lines 1-15) and column 5 (lines 17-46), respectively, and later state (claim 5)

that the streaming server and the feed distributor are disclosed between column 6 line 57 and column 7 line 19. Therefore, the rejection of claim 5 should be withdrawn on Appeal.

Furthermore, reading section 4.c. and section 5.a. of the final Office Action, Appellants note that the Examiner is using contradictory statements:

- i. "Matthews teaches: the streaming server and the feed distributor are located on the same machine...", see section 5 a., page 7 of the final Office Action.
- ii. "Matthews does not teach: the feed distributor located on the server side. However, Fryer discloses...", see section 4 c., lines 1-2 of the first full paragraph at page 6 of the final Office Action.

Looking at above points **i.** and **ii.**, Appellants do not understand how a feed distributor which is not located on the server side (point **ii.**) can be located on the same machine of the streaming server (point **i.**).

Hence, Claim 5 is patentable over Matthews, Fryer, Gear and Sato and the Examiner's rejection should be reversed on appeal.

# Claim 6

Claim 6, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.

#### <u>Claim 7</u>

- 1) Claim 7, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.
- 2) Appellants also submit that Matthews does not disclose, suggest or teach the following feature recited by Claims 7 of the present application:

"further comprising a <u>plurality of client applications</u>, each client <u>application comprising a client-specific user-operated control unit</u> communicating with the feed distributor on the server side and controlling

operation of the feed distributor on the server side separately from the other client applications" (emphasis added)

In section 5.c. of the final Office Action, the Examiner makes reference to Matthews, lines 66-67 of column 7 in order to show the presence, in Matthews, of a plurality of client applications and lines 57 of column 6 through line 32 of column 7 in order to show the remaining characteristics of claims 7 and 27 of the present application.

Appellants note that column 7 lines 66-67 of Matthews recite a standard sentence under patent law: "In compliance with the statute, the invention has been described in language more or less specific as to structural..." which does not disclose any plurality of client applications. Therefore, where is a "plurality of client applications" shown in Matthews?

Furthermore, Appellants note, as per claims 5 and 25, that the Examiner is making reference to the passage disclosed between line 57 of column 6 and line 32 of column 7 for the first time. In other words, given that claim 7 is dependent on claim 1, the rejection of claim 1 should be consistent with the rejection of claim 1, whenever appropriate. The Examiner cannot first state (claim 1) that the streaming server and the feed distributor are disclosed at column 6 (lines 1-15) and column 5 (lines 17-46), respectively, and later state (claim 5) that the streaming server and the feed distributor are disclosed between column 6 line 57 and column 7 line 19. Therefore, the rejection of claim 7 should be withdrawn on Appeal.

Hence, Claim 7 is patentable over Matthews, Fryer, Gear and Sato and the Examiner's rejection should be reversed on appeal.

#### Claim 8

Claim 8, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato.

- 1) Claim 25, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.
- 2) Appellants also submit that Matthews does not disclose, suggest or teach the feature recited by Claim 25 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 5 above.

## Claim 26

Claim 26, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.

#### Claim 27

- 1) Claim 27, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.
- 2) Appellants also submit that Matthews does not disclose, suggest or teach the feature recited by Claim 27 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 7 above.

#### Claim 28

Claim 28, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato.

# Claim 47

Claim 47, at least based on its indirect dependency on Claim 43, is patentable over Matthews, Fryer, Gear and Sato.

# Claim 54

Claim 54, at least based on its indirect dependency on Claim 50, is patentable over Matthews, Fryer, Gear and Sato.

Issue 4: Whether Claims 10, 32, 49 and 57 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,706,054 to Hannah (hereinafter "Hannah")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 10, 32, 49 and 57 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Hannah. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

# <u>Claim 10</u>

- 1) Claim 10, at least based on its dependency on Claims 1, is patentable over Matthews, Fryer, Gear, Sato and Hannah.
- 2) In section 6 of the final Office Action, the Examiner states that "Matthews does not explicitly teach: A/V files comprise key frames; and the control unit instructs the feed distributor to switch between the first and second A/V files when the key frame of the second A/V file is encountered. However, according to the Examiner, such feature is apparently disclosed in Hannah, column 3, lines 32-37.

Appellants note that column 3 lines 32-37 of Hannah states that: "As well known in the art, the sequence of video frames input at 39 can include one or more key frames [...] which often are used as reference for the start of a particular video scene. Preferably, AFC [automatic focusing control] filtering for a sequence of video frame start with a key frame".

In view of the above, Appellants note that Hannah teaches to use key frames in order to choose different scenes of a single video stream.

However, where does Hannah disclose "the control unit [which] instructs the feed distributor to switch between the first video file and the second video file when a key frame of the second video file is encountered"? (emphasis added). In particular, where is the switching "between the first video file and the second video file when a key frame of the second video file is encountered" shown in Hannah?

Hence, Claim 10 is patentable over Matthews, Fryer, Gear, Sato and Hannah and the Examiner's rejection should be reversed on appeal.

#### Claim 32

- 1) Claim 32, at least based on its dependency on Claim 21, is patentable over Matthews, Fryer, Gear, Sato and Hannah.
- 2) Appellants also submit that Hannah does not disclose, suggest or teach the feature recited by Claim 32 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 10 above.

#### Claim 49

- 1) Claim 49, at least based on its dependency on Claims 43, is patentable over Matthews, Fryer, Gear, Sato and Hannah.
- 2) Appellants also submit that Hannah does not disclose, suggest or teach the feature recited by Claim 49 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 10 above.

#### Claim 57

1) Claim 57, at least based on its dependency on Claims 50, is patentable over Matthews, Fryer, Gear, Sato and Hannah.

2) Appellants also submit that Hannah does not disclose, suggest or teach the feature recited by Claim 57 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 10 above.

Issue 5: Whether Claims 11-12 and 33-34 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 6,757,305 to Soepenberg (hereinafter "Soepenberg")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 11-12 and 33-34 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Soepenberg. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

# Claim 11

Claim 11, at least based on its direct or indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.

#### Claim 12

- 1) Claim 12, at least based on its direct or indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.
- 2) Appellants also submit that Soepenberg does not disclose, suggest or teach the following feature recited by Claims 12 of the present application:

"wherein the user-operated control unit first requests the event parameters from the feed distributor and then instructs the streaming server to start streaming"

In section 7 of the final Office Action, the Examiner makes reference to Soepenberg, column 4 lines 6-18, in order to show that the above features would been obvious to one of ordinary skill in the art at the time of applicant's invention. Appellants have reviewed the passages cited by the Examiner but have not been able to find where, in such passage, a "user-operated control unit first requests the event parameters from the feed distributor and then instructs the streaming server to start streaming" is disclosed.

Hence, Claim 12 is patentable over Soepenberg and the Examiner's rejection should be reversed on appeal.

#### Claim 33

Claim 33, at least based on its direct or indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.

#### Claim 34

- 1) Claim 34, at least based on its direct or indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.
- 2) Appellants also submit that Soepenberg does not disclose, suggest or teach the feature recited by Claim 34 of the present application. In particular, Appellants make reference to the arguments presented with reference to claim 12 above.

Issue 6: Whether Claims 13, 35 and 58 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 6,757,305 to Soepenberg (hereinafter "Soepenberg")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 13, 35 and 58 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato

and Soepenberg. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

#### Claim 13

- 1) Claim 13, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.
- 2) In section 8 of the final Office Action, the Examiner rejects some of the event parameters disclosed in claim 13 on the basis of personal opinions without making reference to any documents. If the Examiner wants to do that, he is requested to sign an affidavit.

In view of the above, Appellants submit that the Examiner's rejections are improper and should be reversed on appeal.

## Claim 35

- 1) Claim 35, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.
- 2) Appellants submit that the Examiner's rejection of claim 35 is improper and should be reversed on appeal. In particular, Appellants make reference to the arguments presented with reference to claim 13 above.

#### Claim 58

- 1) Claim 58, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear, Sato and Soepenberg.
- 2) Appellants submit that the Examiner's rejection of claim 58 is improper should be reversed on appeal. In particular, Appellants make reference to the arguments presented with reference to claim 13 above.

Issue 7: Whether Claims 14 and 36 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter Matthews), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter Fryer), U.S. Pat. No. 5,170,252 to Gear (hereinafter Gear), U.S. Pat. No. 5,884,004 to Sato (hereinafter Sato), U.S. Pat. No. 6,757,305 to Soepenberg (hereinafter Soepenberg) and U.S. Pat. No. 5,649,105 to Aldred (hereinafter Aldred)

In the final Office Action of September 19, 2006, the Examiner rejects Claims 14 and 36 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato, Soepenberg and Aldred. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

#### Claim 14

Claim 14, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear Sato, Soepenberg and Aldred.

#### Claim 36

Claim 36, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear Sato, Soepenberg and Aldred.

Issue 8: Whether Claims 15 and 37 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter Gear), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato"), U.S. Pat. No. 6,208,335 to Gordon (hereinafter "Gordon") and U.S. Pat. No. 5,613,122 to Burnard (hereinafter "Burnard")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 15 and 37 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato,

Gordon and Burnard. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

# Claim 15

Claim 15, at least based on its dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato, Gordon and Burnard.

#### Claim 37

Claim 37, at least based on its dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato, Gordon and Burnard.

Issue 9: Whether Claims 16, 17, 38 and 39 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 6,510,553 to Hazra (hereinafter "Hazra")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 16, 17, 38 and 39 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Hazra. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

## Claim 16

Claim 16, at least based on its direct dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato and Hazra.

# <u>Claim 17</u>

Claim 17, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato and Hazra.

Claim 38, at least based on its direct dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato Hazra.

## Claim 39

Claim 39, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato Hazra.

Issue 10: Whether Claims 19 and 41 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter Matthews), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and Kunda/McCanta (Google Groups) (hereinafter "Kunda/McCanta")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 19 and 41 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Kunda/McCanta. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

## Claim 19

Claim 19, at least based on its indirect dependency on Claim 1, is patentable over Matthews, Fryer, Gear and Sato and Kunda/McCanta.

#### Claim 41

Claim 41, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato and Kunda/McCanta.

Issue 11: Whether Claim 29 is patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"),

# U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,410,698 to Danneels (hereinafter "Danneels")

In the final Office Action of September 19, 2006, the Examiner rejects Claim 29 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Danneels. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

### Claim 29

Claim 29, at least based on its dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato and Danneels.

Issue 12: Whether Claims 30 and 31 are patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,410,698 to Danneels (hereinafter "Danneels")

In the final Office Action of September 19, 2006, the Examiner rejects Claims 30 and 31 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Danneels. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

## Claim 30

Claim 30, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato and Danneels.

#### Claim 31

Claim 31, at least based on its indirect dependency on Claim 21, is patentable over Matthews, Fryer, Gear and Sato and Danneels.

Issue 13: Whether Claim 55 is patentable under 35 U.S.C. 103(a) over U.S. Pat. No. 5,600,368 to Matthews (hereinafter "Matthews"), in view of U.S. Pat. No. 6,233,428 to Fryer (hereinafter "Fryer"), U.S. Pat. No. 5,170,252 to Gear (hereinafter "Gear"), U.S. Pat. No. 5,884,004 to Sato (hereinafter "Sato") and U.S. Pat. No. 5,410,698 to Danneels (hereinafter "Danneels")

In the final Office Action of September 19, 2006, the Examiner rejects Claim 55 under 35 U.S.C. 103(a) as being obvious over Matthews in view of Fryer, Gear, Sato and Danneels. Appellants respectfully disagree with the Examiner's rejection for the following reasons.

## Claim 55

Claim 55, at least based on its dependency on Claim 50, is patentable over Matthews, Fryer, Gear and Sato and Danneels.

\* \* \* \* \*

### Conclusion

For the extensive reasons advanced above, Appellants respectfully contend that each claim is patentable. Therefore, reversal of all rejections and objections is courteously solicited.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 12-0415. In particular, if this Appeal Brief is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

I hereby certify that this correspondence is being deposited with the United States Post Office with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22323-1450 on

April 18, 2007
(Date of Mailing)

Diane Osollo
(Name of Person Mailing)

(Signature)

April 18, 2007
(Date)

Respectfully submitted,

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#### Encls.:

- Appendices A, B and C
- Brief on Appeal Check in the amount of \$ 250.00- Postcard
- Petition for time extension
- Two-month extension fee \$ 225.00

event;

- 1. A computer system for viewing and switching of audio-video data, comprising:
  - a plurality of audio and video sources containing information referring to an

a streaming server, streaming the contents of a first audio file and a first video file from the audio and video sources to a plurality of users over a network, the first audio file being interleaved with the first video file, the streaming server establishing separate sessions with the plurality of users by sending each user a separate stream;

- a feed distributor, connected between the audio and video sources and the streaming server, the feed distributor controllably feeding the first audio file and first video file to the streaming server; and
- a user-operated control unit communicating with the feed distributor and controlling operation of the feed distributor, so as to instruct the feed distributor to switch between video files whereby, upon switching, the feed distributor feeds to the streaming server a second video file which is different from the first video file without altering the first audio file, the second video file being interleaved with the first audio file.
- 2. The system of claim 1, wherein the user-operated control unit is a remote control unit.
- 4. The system of claim 1, wherein the system is a client-server system, the control unit being located on the client side, and the streaming server and the feed distributor being located on the server side.
- 5. The system of claim 4, wherein the streaming server and the feed distributor are located on the same machine.
- 6. The system of claim 4, wherein the streaming server and the feed distributor are located on different machines.
- 7. The system of claim 4, further comprising a plurality of client applications, each client application comprising a client-specific user-operated control unit communicating with the feed distributor on the server side and controlling operation of the feed distributor on

the server side separately from the other client applications.

- 8. The system of claim 4, wherein the streaming server sends different streams to different clients, one audio file and one video file being sent to each of said different clients, each of said different clients switchably controlling said video files independently from the other clients.
- 9. The system of claim 1, wherein the plurality of audio and video files comprises a single audio file and a plurality of video files, each video file corresponding to a different point of view of the event.
- 10. The system of claim 1, wherein video files are differentially compressed before streaming and comprise key frames, and wherein the control unit instructs the feed distributor to switch between the first video file and the second video file when a key frame of the second video file is encountered.
- 11. The system of claim 1, wherein the event is described through event parameters.
- 12. The system of claim 11, wherein the user-operated control unit first requests the event parameters from the feed distributor and then instructs the streaming server to start streaming.
- 13. The system of claim 11, wherein said parameters comprise:
- 1) A number of different points of view of the event;
- 2) A textual description of each point of view;
- 3) A unique logic identifier of each point of view;
- 4) A size of a main screen window visualizing a current point of view;
- 5) A stream bandwidth;
- 6) A duration of the event; and
- 7) An initial point of view.

- 14. The system of claim 13, wherein the logic identifier of each point of view is locally defined.
- 15. The system of claim 1, wherein:

the feed distributor comprises a server session manager, a theatre descriptor and a stream reader;

the streaming server comprises a stream producer; and the user-operated control unit comprises an interface builder.

- 16. The computer system of claim 1, wherein said streaming server streams additional audio and video files, the additional audio and video files being output on secondary windows of a screen of the user, the secondary windows being different from a main window of the screen of the user where said first audio file and said first video file are output and on which switching occurs.
- 17. The computer system of claim 16, wherein said additional audio and video files occupy a bandwidth which is reduced when compared with the bandwidth occupied by said first audio and video file.
- 19. The computer system of claim 7, wherein a user controls switching for a number of other users.
- 20. The computer system of claim 1, where switching occurs in a preprogrammed way.
- 21. A computer system for viewing and switching of audio-video data, comprising:
- a plurality of audio and video sources containing information referring to an event;
- a streaming server, streaming the contents of a first audio file and a first video file from the audio and video sources to a plurality of users over a network, the first audio file being interleaved with the first video file, the streaming server establishing separate sessions with the plurality of users by sending each user a separate stream;

- a feed distributor, connected between the audio and video sources and the streaming server, the feed distributor controllably feeding the first audio file and first video file to the streaming server; and
- a user-operated control unit communicating with the feed distributor and controlling operation of the feed distributor, so as to instruct the feed distributor to switch between audio files whereby, upon switching, the feed distributor feeds to the streaming server a second audio file which is different from the first audio file without altering the first video file, the second audio file being interleaved with the first video file.
- 22. The system of claim 21, wherein the user-operated control unit is a remote control unit.
- 24. The system of claim 21, wherein the system is a client-server system, the control unit being located on the client side, and the streaming server and the feed distributor being located on the server side.
- 25. The system of claim 24, wherein the streaming server and the feed distributor are located on the same machine.
- 26. The system of claim 24, wherein the streaming server and the feed distributor are located on different machines.
- 27. The system of claim 24, further comprising a plurality of client applications, each client application comprising a client-specific user-operated control unit communicating with the feed distributor on the server side and controlling operation of the feed distributor on the server side separately from the other client applications.
- 28. The system of claim 24, wherein the streaming server sends different streams to different clients, one audio file and one video file being sent to each of said different clients, each of said different clients switchably controlling said audio files independently from the other clients.

- 29. The system of claim 21, wherein the plurality of audio and video files comprises a single video file and a plurality of audio files.
- **30.** The system of claim 29, wherein each audio file corresponds to a different listening point of the event.
- 31. The system of claim 29, wherein each audio file corresponds to a different audio source.
- 32. The system of claim 21, wherein audio files are differentially compressed before streaming and comprise key frames, and wherein the control unit instructs the feed distributor to switch between the first audio file and the second audio file when a key frame of the second audio file is encountered.
- 33. The system of claim 21, wherein the event is described through event parameters.
- **34.** The system of claim 33, wherein the user-operated control unit first requests the event parameters from the feed distributor and then instructs the streaming server to start streaming.
- 35. The system of claim 33, wherein said parameters comprise:
- 1) A number of different points of view of the event;
- 2) A textual description of each point of view;
- 3) A unique logic identifier of each point of view;
- 4) A size of a main screen window visualizing a current point of view;
- 5) A stream bandwidth;
- 6) A duration of the event; and
- 7) An initial point of view.

- **36.** The system of claim 35, wherein the logic identifier of each point of view is locally defined.
- **37.** The system of claim 21, wherein:

the feed distributor comprises a server session manager, a theatre descriptor and a stream reader;

the streaming server comprises a stream producer; and the user-operated control unit comprises an interface builder.

- 38. The system of claim 21, wherein said streaming server streams additional audio and video files, the additional audio and video files being output on secondary windows of a screen of the user, the secondary windows being different from a main window of the screen of the user where said first audio file and said first video file are output and on which switching occurs.
- **39.** The system of claim 38, wherein said additional audio and video files occupy a bandwidth which is reduced when compared with the bandwidth occupied by said first audio and video file.
- 41. The system of claim 27, wherein a user controls switching for a number of other users.
- 42. The system of claim 21, where switching occurs in a preprogrammed way.
- **43.** A computer-operated method for viewing and switching of audio-video data, comprising the steps of:

providing a plurality of audio and video sources containing information referring to an event;

streaming contents of a first audio file and a first video file from the audio and video sources to a plurality of users over a network, the first audio file being interleaved with the first video file;

establishing separate sessions with the plurality of users by sending each user a separate stream;

controlling the streaming of video files, so as to switch between video files, streaming, upon switching, a second video file which is different from the first video file without altering the first audio file, the second video file being interleaved with the first audio file.

- 44. The method of claim 43, wherein the step of controlling is a step of remote controlling.
- **46.** The method of claim 43, wherein the step of controlling originates on a client side and the step of streaming originates on a server side.
- 47. The method of claim 46, wherein different streams are sent to different clients, each of said different clients switchably controlling the video files independently from the other clients.
- **48.** The method of claim 43, wherein the plurality of audio and video sources comprises a single audio source and a plurality of video sources, each video source corresponding to a different point of view of the event.
- **49.** The method of claim 43, wherein video files are differentially compressed before streaming and comprise key frames, and wherein the controlling step switches between the first video file and the second video file when a key frame of the second video file is encountered.
- **50.** A computer-operated method for viewing and switching of audio-video data, comprising the steps of:

providing a plurality of audio and video sources containing information referring to an event;

streaming contents of a first audio file and a first video file from the audio and

video sources to a user over a network, the first audio file being interleaved with the first video file;

establishing separate sessions with the plurality of users by sending each user a separate stream;

controlling the streaming of audio files, so as to switch between audio files, streaming, upon switching, a second audio file which is different from the first audio file without altering the first video file, the second audio file being interleaved with the first video file.

- **51.** The method of claim 50, wherein the step of controlling is a step of remote controlling.
- 53. The method of claim 50, wherein the step of controlling originates on a client side and the step of streaming originates on a server side.
- **54.** The method of claim 53, wherein different streams are sent to different clients, each of said different clients switchably controlling the audio files independently from the other clients.
- 55. The method of claim 50, wherein the plurality of audio and video sources comprises a single video source and a plurality of audio sources, each audio source corresponding to a different listening point of the event.
- 57. The method of claim 50, wherein audio files are differentially compressed before streaming and comprise key frames, and wherein the controlling step switches between the first audio file and the second audio file when a key frame of the second audio file is encountered.
- 58. The system of claim 12, wherein said parameters comprise:
- 1) A number of different points of view of the event;
- 2) A textual description of each point of view;

- 3) A unique logic identifier of each point of view;
- 4) A size of a main screen window visualizing a current point of view;
- 5) A stream bandwidth;
- 6) A duration of the event; and
- 7) An initial point of view.

\* \* \* \* \*

There is no evidence submitted with the present Brief on Appeal.

No copies of decisions rendered in related proceedings are being submitted.